

Medical Societies

NEW BRUNSWICK COUNCIL OF PHYSICIANS AND SURGEONS

THE annual meeting of the Council of Physicians and Surgeons of New Brunswick was held in Fredericton on April 19th, 1917. Those present were: T. F. Sprague, M.D., Woodstock; J. D. Lawson, M.D., St. Stephen; S. C. Murray, M.D., Albert; Thomas Walker, M.D., St. John; W. W. White, M.D., St. John; A. F. Emery, M.D., St. John; L. M. Curren, M.D., St. John; G. C. Van Wart, M.D., Fredericton; John S. Bentley, M.D. (the Registrar), St. John.

The following officers were elected for the ensuing year: president, L. M. Curren, M.D., St. John; treasurer, A. F. Emery, M.D., St. John; registrar, John S. Bentley, M.D., St. John.

The professional examiners and various committees were appointed. The professional examinations will be held in St. John twice each year commencing on the fourth Wednesday in June and on the fourth Wednesday in January. Much business of a routine nature was transacted. The next meeting of the council will be held at St. John in July, when the New Brunswick Medical Society will be in session.

TORONTO ACADEMY OF MEDICINE

At the annual meeting of the Academy of Medicine, which was held in the Academy Building, 13 Queen's Park, Toronto, on May 10th, the following officers and members of Council were elected for the session of 1917-18: President, Dr. D. J. Gibb Wishart; vice-president, Dr. A. Primrose; honorary secretary, Dr. J. H. Elliott; honorary treasurer, Dr. J. H. McConnell; past president, Dr. John Ferguson. Chairmen of sections—Medicine, Dr. G. W. Ross; Surgery, Dr. W. A. Cerswell; Pathology, Dr. F. W. Rolph; State Medicine, Dr. Gordon Bates; Ophthalmology and Oto-Laryngology, Dr. F. C. Trebilcock; Pediatrics, Dr. George E. Smith; Drs. A. H. Perfect, H. B. Anderson, F. N. G. Starr, J. G. Fitzgerald, Wm. Goldie, C. P. Lusk, W. A. Young and B. P. Watson.

PETERBOROUGH MEDICAL SOCIETY

A MEETING of the Peterborough Medical Society was held on March 22nd, with a large number of members present, not only the city but the surrounding towns being well represented. On this occasion the paper of the evening, on Pyelitis, was given by Dr. Fraser, of Montreal. After the discussion which followed, Drs. Cameron and Gallivan, on moving a hearty vote of thanks, paid a warm tribute to Dr. Fraser on the excellent manner in which he had treated his subject and said it was with great pleasure that the Society had welcomed one from their own county, who was making a name for himself in the medical world.

THE MONTREAL MEDICO-CHIRURGICAL SOCIETY

THE eighth regular meeting of the Society was held in the Montreal General Hospital on Friday, January 19th, 1917. The meeting took the form of a clinical evening, the members of the Society being the guests of the Medical Board of the Hospital. After the programme refreshments were served; there were ninety-eight members present.

PROGRAMME

PART I.—CLINICAL CASES

(Surgical Amphitheatre)

1. "Recurring intestinal obstruction," Dr. Hill.
2. (a) "Vaquez's disease," (b) "Tumour of the liver," Dr. Lafleur.
3. "Charts from cases of transfusion," Dr. Henry.
4. "The galvano-cautery in the treatment of laryngeal tuberculosis," Dr. Craig.
5. "Tumour of the mouth," Dr. Hamilton.
6. (a) "Coxa vara and valga," (b) End results of operations upon the carpal bones," Dr. Nutter.
7. "Selected skiagrams," Dr. Wilkins.
8. (a) "Sarcoma of the kidney;" (b) "Tuberculosis of the ilio-cæcal region," (c) Regeneration of shaft of femur," Dr. Barlow.
9. (a) "Traumatic epilepsy;" (b) "Imperforate anus;" (c) Bone graft of humerus;" (d) "Pressure upon trachea by enlarged thyroid. Child of eight years," Dr. Pennoyer.
10. (a) "Graves' disease without enlargement of the thyroid gland;" (b) "Concealed tuberculosis;" Dr. Gordon.

11. (a) "Actinomycosis." (b) "Results of polior ligation and partial excision of thyroid in Graves' disease," Dr. von Eberts.
12. (a) "Vesical calculus in a child three and a half years old;" (b) "Pyonephrosis vesical fistula," Dr. Powell.
13. "Differential diagnosis between tic and chorea," Dr. Shirres.
14. (a) "Evulsion of tubercle of tibia;" (b) "Gunshot injury of humerus," Dr. Smythe.

PART II.—DEMONSTRATIONS

1. X-ray department." Dr. Wilkins.
2. "Series of eye cases. No. V. operating room." Dr. Mathewson.
3. "Pathological specimens. Governors' Hall." Dr. Scott.

THE ninth regular meeting of the Society was held Friday, February 2nd, 1917, Dr. W. S. Morrow, president in the chair.

PATHOLOGICAL SPECIMENS: Series by Dr. Horst Oertel.

These specimens are from an interesting and unusual case of lymphatic leukæmia in the service of Dr. Martin. The patient was a girl of eight years, admitted to the hospital on November 15th and died January 29th, so that the course of the disease was a short one. She had sought admission for cough, pain in the stomach and enlarged glands and the disease is said to have commenced six weeks before admission and five days after tonsillitis. Then the right parotid gland began to swell, followed by swelling of the left and of the submaxillary glands. One week later a cough developed and sputum appeared after a few days; she had chills and night sweats but had not lost weight or colour. Femoral glands also became enlarged.

Physical examination on admission to the Royal Victoria Hospital showed general glandular enlargement, but no increase in size of spleen. Blood pressure, 115 systolic and 80 diastolic. Liver palpable. Urine pale, amber, acid, sp. gr. 1020. The blood examination was interesting from the start: after admission, on November 16th, the red blood cells were 2,400,000, whites 27,400 and hæmoglobin 54 per cent. The red blood cells decreased quite rapidly so that at the end of January, shortly before death, they had dropped to 690,000; hæmoglobin to 18 per cent., a severe anæmia; while throughout there was a corresponding increase in lymphocytes, from 27,400 to 201,000. The increase in lymphocytes was almost entirely on the part of typical, small lymphocytes,

so that here we have a rather exceptional picture of acute lymphatic leukæmia in which the increase in white blood cells is due to small typical lymphocytes, as contrasted with the usual acute lymphatic leukæmia, in which the prevailing leucocytes are of the large lymphoblastic or myeloblastic types. The polymorphonuclears at the beginning were only 12 per cent., the small lymphocytes, 57½ per cent.; later the polymorphonuclears dropped to 4 per cent., while the small lymphocytes rose to 82 per cent., transitional 2 per cent., undetermined 8 per cent., myelocytes about 2 per cent. So that we can, perhaps, speak in this case, following Leube's terminology, of a leukanæmia.

Autopsy disclosed several additional interesting facts. In the first place there existed a general, very marked, lymphoid hyperplasia in conformity with the usual anatomical findings of the lymphatic leukæmias. The lymph glands are markedly enlarged but are discrete and remain individual; the gross character of the lymph glands varies; the peribronchial glands are very pulposus, splenic, while the enlarged lymph glands of the mesentery and other parts are white, firm, and pale. Similar to those of the peribronchial variety are those in the mediastinal region.

The spleen on the other hand is small and shows very limited lymphoid hyperplasia which impresses one more as infiltrative in character. It seems that here the spleen has not taken an essential part in the formation of lymphoid cells. The thymus is well preserved, large, extremely firm, solid and well outlined, and microscopically shows its tissue almost entirely replaced by what appears to be lymphoid infiltration, so much so that it is difficult to find any thymus structure at all.

The bone marrow was distinctly reddish at autopsy and showed, microscopically, overgrowth of well-differentiated lymphoid cells, mostly small; very few myelocytes, great loss of red blood cells, but hardly any new red blood formation.

The last point of interest is the condition of the kidney. It is well known that in all leukæmias there is leucoblastic infiltration into the kidney. In this case it is so to a most extraordinary degree. This kidney weighs over 400 grams, which would be, even for an adult, a kidney of considerable size and weight. It is uniformly enlarged, bulging, perfectly smooth, pale white, with distinct hæmorrhagic areas and streaks, mottled. Microscopic sections show very diffuse and extensive infiltration by lymphocytes so great that in certain parts medulla and cortex have been almost entirely obliterated and the kidney substance looks entirely like lymphoid tissue.

For some time a discussion has been going on whether the lymphoid nodules and infiltration which occur in leukæmias are really true infiltrations or local lymphoblastic or myeloblastic foci. I think in these it is safe to assume that the largest number of cells are directly derived from the blood; one can see them early, perivascular in origin, and from these places they infiltrate into the tissue spaces and into the surrounding substance, primarily between the tubules, and ultimately replace them. The liver shows much smaller foci.

DISCUSSION: Dr. F. M. Fry: I saw the leukæmic case in my office some weeks before admission (sent to me by Dr. Viner) and advised that she be brought to hospital for further study. The child presented then a most striking enlargement of the salivary glands and she was anæmic and seemed to have all the symptoms described by Mikulicz years ago. It is known that these cases show a pseudo-leukæmia which later progresses to a true leukæmia that proves fatal, as in this child.

Dr. C. F. Martin: One very interesting feature about this case was that five days before the onset of symptoms there had been a tonsillectomy which naturally associates the disease with the idea of an infection. In the early stage of the disease there was not much lymphocytosis. We made a temporary diagnosis of general enlargement of the parotid glands and cervicals of infectious origin. The fact that the condition was of long standing excluded more or less the diagnosis of mumps. We then discussed Mikulicz's disease but the absence of any condition around the lacrymal glands seemed not to confirm it, while the leukæmia developing, whether on a Mikulicz disease or not I cannot say, settled the matter.

Dr. W. F. Hamilton: I remember distinctly a case under my observation several years ago in which the spleen was greatly increased and the liver as well. A leucocyte count of 6,000 with a variety of cells corresponding to myelogenous spleno-leukæmia. The man was forty years of age. It was reported by me as a case of Leube's leukanæmia. I would like to ask if the leukanæmia is not a type distinct from leukæmia.

Dr. Horst Oertel: With regard to Dr. Hamilton's question I am quite willing to admit that my use of the term leukanæmia does not exactly correspond to what Leube originally described, because in his first case, to which he applied the term, there existed, as Dr. Hamilton has pointed out, a blood picture of a pernicious anæmia with only a moderate increase of leucocytes, but great relative increase of mononuclears. In this case, while the anæmia

was very grave, the blood picture was not strictly that of a pernicious anæmia and the white cell increase was distinctly leukæmia in quantity and quality. However, later reports have included in the group of leukanæmia all those profound blood alterations which show marked changes in the formation of red as well as white cells and in this sense, I believe, the term is applicable to this case.

PHOTOGRAPHIC DEMONSTRATION: By Dr. G. Gordon Campbell, showing a series of common skin diseases.

PAPER: The paper of the evening was read by Dr. E. H. Mason on the clinical application of functional diagnosis in nephritis.

DISCUSSION: Dr. C. F. Martin: I would like, first of all, to express my appreciation of the work Dr. Mason has put before the Society to-night. Having followed a good deal of this work for the past year or so, I have been able to see the exactness with which he has carried it out. A feature which interests us here to-night in connexion with this work is the demonstration that our older ideas about the anatomical and clinical classifications of kidney disease rather tend to be brushed aside. It is kidney *function* which gives the best idea of what the real state of the kidney is. I recall the frequency with which patients suddenly developed very serious kidney conditions when the ordinary tests that we adopted were negative, or almost negative. Pregnant women whose urine showed little or no evidence of albumin or other sign of disease, would no doubt by a functional test have given a different picture. We recognize pretty well that the mere presence of albumin in the urine and the mere taking of specific gravity once or twice amounts to nothing and tells little of what the kidney really can do. On the other hand we recognize that these tests can only be done with more or less training. Dr. Mason has told us to-night two facts: (1) that by simple measures we can estimate prognosis, and (2) that it is of great importance to study the nightly output from the kidneys and the decimal variations of the specific gravity. As to either the fallacy or correctness of Dr. Mason's observations it seems to me that the very constancy with which the results came out is sufficient to plead for their accuracy. The interesting fact that from day to day the observations that have been made have proved accurate, would go to show that evidently we have a great deal to look forward to in the usefulness of this test, and Dr. Mason is to be congratulated not only on the contents of his paper but on the way in which it has been delivered.

Dr. A. G. Morphy: One striking feature of this paper is the fact that the amount of the excretion of albumin by the kidneys in cases of nephritis is hardly mentioned. I would like to ask Dr. Mason whether he has been able to establish any relation between the amount of albumin excreted by the kidneys and the nitrogen tests which he employs. It really has a practical application. For instance, Dr. Mason says that in cases of passive congestion there is very little trouble with the excretion of urea, etc.; supposing he had a case of passive congestion with a leakage of albumin by the kidney, what practical application would that have upon the diet of the patient?

Dr. M. Lauterman: Dr. Mason's splendid paper recalls some work I undertook while a house surgeon at the Montreal Maternity Hospital some twenty odd years ago. He has established from proven facts theories which I then held, though unfortunately I was unable to go on with the work and prove my views. The first thing I would like to take issue on with Dr. Mason is the importance of the phthalein test: he states that the phthalein indication alone is of no value. As one who has done considerable surgery in connexion with the urological organs, I feel that this test alone is probably the best the surgeon has of his patient's ability to stand surgical interference. I do not mean to imply that the other valuable data to be acquired by the different tests Dr. Mason has outlined are not of value, I think they are probably of more value to the internist than to the surgeon, but in my opinion, and certainly from my experience, this phthalein test is the outstanding test of value as an index in surgical work. In my own limited experience I have classified these tests into two groups for my work, first the excretory, then the retention group. I believe with Dr. Mason that it requires a great deal of work and training and is beyond the average man, but that it is important is apparent not only to the average man but to every one of us who have heard this paper to-night and I am sure the development of this work will not only mark an epoch in this field but we shall be in a position to appreciate more fully the work that is being quietly done in our midst by careful and conscientious observers.

Dr. W. S. Morrow: I would like to express my personal appreciation of this paper to-night as this seems to me one of the subjects in which our knowledge has undergone a great deal of development lately and I would like to ask Dr. Mason, first, whether he often found any great amount of chlorine retention without its giving some clinical indication in the way of œdema,

and secondly, whether he found any serious degree of nitrogen retention without showing a drop in the total quantity.

Dr. E. H. Mason: As regards Dr. Morphy's question about the albumin I cannot say that I have found any relation at all between the function of the kidney and the amount of albumin in the urine. One might expect that those cases which have a large amount of albumin would show impaired urea excretion, but that is not so. A great many of our cases are purely chloride ones and have enormous amounts of albumin. If we cut down their protein intake there is the question whether the excretion of albumin would not decrease more rapidly than it would if we kept up a high proteid intake. But I have not found any relation between the various functions of the kidney and the amount of albumin excreted. As regards the dieting in passive congestion of the kidney, I think that the presence of albumin in the urine in passive congestion of the kidney would not to my mind make any difference at all as regards the diet. The fluid and the salt are the two things which need to be restricted, as these patients are often loaded up with fluid. I do not think the protein intake would influence the function to any appreciable extent unless a great deal was given. Epstein says that in chronic parenchymatous nephritis he does not cut down the protein intake at all; just the salt and fluid. As regards the question of the phthalein test, I spoke of this as of not much use alone, that is from the medical point of view; it is of value from the surgical. It is a test of the total kidney function, but it does not show whether the kidney can handle urea or chlorides. The phthalein is no index at all of what the disturbance is in the kidney, it just gives you the total kidney function, and from the surgical point of view that is the main thing. From the point of view of treatment it fails to tell anything as regards the necessity of cutting down the proteid, the salt, or the fluid in the diet. As regards Dr. Morrow's question, I think that in a general way you will find a disturbance of the chlorine metabolism associated with oedema. When you have oedema you almost always have a raised threshold which means damming back of salt within the body and most of the cases under our notice that have had chlorine retention have had oedema.

THE tenth regular meeting of the Society was held Friday, February 16th, 1917, Dr. W. S. Morrow, president, in the chair.

LIVING CASE: Glioma of the frontal lobe. The result of decompression, by Dr. G. S. Mundie.

The patient is a man of forty-four years, an overseer in a cotton mill. He was admitted to the Royal Victoria Hospital on November 6th, 1916, complaining of headache and attacks of hiccough. His illness began in March with headaches in the frontal region, in August he started vomiting, chiefly in the morning and of a projectile nature with no relation to food and no pain. Was in the Montreal General Hospital for seven weeks and there it was discovered that he had a marked optic neuritis on both sides. While there, he also developed incontinence of urine and fæces. The only other thing in the history is that one day while walking out he developed a paresis of his left leg, but this passed off in a short time. There was nothing in the family or personal history.

On admission to the Royal Victoria Hospital there was double optic neuritis with hæmorrhages into the retina; the other cranial nerves were negative. There was some indefinite involvement of the sensory system but nothing marked; no involvement of the motor system. The reflexes were increased on both sides, on the right more than on the left; there was incontinence of urine and fæces. There was a double ankle clonus, more marked on the right side; a questionable Babinski on the right side but definite on the left; no Oppenheim, no Gordon, no disturbance of joint sense. Slight incoördination of left side; on walking the patient has a tendency to fall to the right and backward. He would answer questions after two or three minutes and when asked to explain why he did not answer at once, he said he could not collect his thoughts.

On December 4th, the patient was in considerable distress, with marked pain in the head. Examination showed right ptosis, the right pupil dilated, active to light, and there was a slight lateral nystagmus. We were unable to get him to move the eyes; the left showed an external squint. Knee jerks increased on the right more than left; no Babinski on right side and a questionable on the left; there was a considerable paresis on the left side of the face. Another interesting thing was the fact that he had hallucinations, he definitely saw himself in a hippodrome in England and saw two Russians who were torturing him, and he went through other hallucinations. The question arose whether we had a cerebellar or a frontal lobe tumour to deal with. In his walking he deviated to the right, on the other hand he had this marked mental deterioration which pointed to a frontal lobe tumour. At first we were unable to decide on which side but what helped us eventually was the right ptosis and the left external squint. The man was gradu-

ally getting worse and we decided to operate. He was taken to the operating room and operated on in the right frontal lobe; the scar is quite marked here. The bone flap was turned down and there was marked tension of the brain which protruded at once. On opening the dura nothing but marked tension was noticed. The osteoplastic flap was turned down and the bone broken across. Dr. Archibald's report is as follows:

Brain very tense before dura opened, very slight pulsation. Posterior area uncovered was normal, but anteriorly the brain was congested and felt very soft; about one ounce of straw-coloured fluid was evacuated. A diagnosis of glioma was made and the dura was left open and the bone loosely replaced.

At first there was marked hernia, which has gradually disappeared and the man to-day says he is quite well. The bone is quite movable. The report when he was examined about a week ago showed: osteoplastic flap pushed out considerably so as to make right temporal region prominent; no bony union. General condition is very much improved; memory has improved so that his wife says it is normal; speech is normal and fluent, but patient is inclined to make jokes. Nystagmoid jerking on looking to right; paralysis of lower left facial muscles; tongue protruded slightly to left; left grip is much weaker than right. No incoördination, no weakness in legs. Reflexes are normal. Slight blurring of both optic discs, especially on nasal side, and a few comparatively recent retinal hæmorrhages.

The remarkable part of the story is the condition of the patient. He says he is practically well and able to go back to work. His memory has cleared up but on examination there is still slow cerebration, he does not execute demands as a normal person would.

The pathological report was, vascular cellular glioma.

The question arises here whether the decompression operation does any good or not and the case was presented to show that you do get more or less good results. As regards the future the outlook is not good but you have given the man anywhere from six months to a year of at least comfort.

PATHOLOGICAL SPECIMENS: Series by Dr. W. J. Scott.

1. Specimens from a case of acute pancreatic disease.
2. Specimen of heart showing numerous lacerations, though there had been no fracture of ribs, from a delirious patient who fell from a window to the street, four storeys below.

PAPER: "Fractures of the skull" was the subject taken up for

the paper of the evening. Dr. J. Anderson Springle discussed the subject from the surgical point of view while Dr. G. D. Robins took up the neurological aspect.

DISCUSSION: Dr. A. E. Garrow: The Society is indeed indebted to the readers of these papers for a discussion on this very important subject, and more particularly for the list of aphorisms which Dr. Robins has referred to in the treatment of these acute conditions of the skull, to which I most heartily subscribe. I do not know that I am quite prepared to go the full length that Dr. Springle has gone for, as Dr. Robins has pointed out, there are really two types of cases which demand operative interference and decompression.—at least operative interference in order to procure less pressure within the cranium. Those of epidural hæmorrhage due to rupture of the middle meningeal in which there is a gradually increasing engorgement of vessels certainly require decompression inasmuch as they require removal of bone and consequently removal of blood clot. Then those cases in which we have evidence of subdural hæmorrhage, as shown by blood in the cerebro-spinal fluid with early evidence of concussion, with a certain amount of irritability and the gradual spread of œdema, are the cases in which some interference is called for. With opening of the dura in order to remove distension good results should follow. Whether it is good practice in every case of fracture of the skull, without some very definite evidence of compression, to be brought to the operating room and operated upon without very definite views as to what has happened in that brain, I am not quite prepared to say; one must hesitate before undertaking such very radical treatment.

Dr. F. R. England: I do not know that I can add anything to what has been said by Dr. Robins and Dr. Springle. In head injuries it is always an important question to decide whether the brain has suffered injury or whether the skull alone has been fractured. The cases referred to by Dr. Robins to illustrate a group of cases where there is no question as to the necessity of operative interference remind me of a case which was only recently admitted to my service in the Western Hospital. A young woman fell down stairs and showed symptoms of head injury. Three days later, when I first saw her, she was unconscious, pulse weak and soft, respiration slow, extremities cold, blood pressure 85, spinal fluid bloody. The whole picture was one of intracranial hæmorrhage where the end was fast approaching. The skull over the temporal region on the left side was opened and two ounces of

blood and clots escaped when the dura mater was incised from the middle fossa of the skull. A drainage tube was carried beneath the membranes deep down into the fossa and brought out through the angle of the scalp wound. All the symptoms rapidly improved; she was conscious next day and left the hospital in good condition at the end of three weeks after operation. Dr. Robins remarked that I held that the cases often did best where the injury had been very severe, where the skull had been shattered and driven down upon the brain with laceration of the membranes and even the destruction of the brain tissue. The recoveries in some of these cases is certainly remarkable, and they do not generally suffer from headache, mental feebleness, irritability, or traumatic neurasthenia so frequently seen following head injuries where no operative procedures have been carried out.

Dr. W. E. Archibald: Dr. Robins's paper has been extremely interesting. The question of whether one should operate or not in the presence of a fracture of the skull is in many instances one that taxes more the judgement of the surgeon, one that needs more careful and continuous scientific observation in its decision, than any other. There is, I find, a fairly large number of cases in which operation is obviously necessary; there are a certain number so severe that operation is either out of the question or is undertaken as a last resort and with practically no hope of doing the patient any good; and finally there remains a very large middle class of cases in which judgement as to operation is difficult. I have been tempted frequently to cut the Gordian knot of this difficulty by operating on all cases save the light ones, just as many of us do in the matter of appendicitis; that, however, is not a thoroughly scientific attitude. How are we to determine? It seems to me we have to take a panoramic view of all the symptoms; we must judge, not alone from a lumbar puncture, or alone from the blood pressure, but with these as compared with the work of the respiratory and the cardio-inhibitory centres, and with the depth of unconsciousness, and with the localizing signs which may be found in the examination of the nervous system. We must diagnose the pathological condition present within the skull-cap on the physiological basis. We must not think in terms of the text-book or the catalogue. In the presence of a slow pulse, one below 60, and unconsciousness, we all probably think that operation is strongly indicated; with disturbed rhythm of respiration we think it still more strongly indicated. But there are a great many cases in which blood pressure is not high, not over 150, in which the pulse

runs around 70 to 80, the respirations not at all disturbed, but consciousness is more or less lost: are we to operate on those? A great many of these will get well if you leave them alone, but some of them will die unexpectedly. I have come to see that in a certain number of cases you cannot tell by dint of taking the blood pressure, lumbar puncture, or observing the respirations, what they are going to do; and I have come to believe that in such cases the symptoms of compression, that is, high blood pressure and slow pulse, particularly, are masked by the symptoms of concussion, the low blood pressure and more rapid pulse, the result being that a happy medium or, if you will, an unhappy medium, is struck which leads one to a false sense of security. Therefore I am inclined more and more to concur in Dr. Springle's opinion that we should operate more frequently than we have been accustomed to do in the past. I have gone through stages, first, operating too often, second, too infrequently, and I have now come to the third stage where I operate more frequently than I did because many of these cases are apt to die suddenly without giving any sign that the graver condition was present.

Lumbar puncture is not of much value in the mere establishment of the fact that there is blood in the spinal canal; but it is of considerable value in showing how much blood there is. It is true that the more blood there is in the cerebro-spinal fluid the more serious is the condition present. On one occasion I found a lumbar puncture pressure of 1000 m.m. of water in a case of what was nothing more than concussion on the third day of the injury without rise of general blood pressure. This rise indicated an extreme degree of pressure in the cerebro-spinal system; I was able to relieve all his symptoms, particularly violent headache, by lumbar puncture alone. On the other hand you may get a very low lumbar puncture pressure when the brain stem is pushed down in the foramen magnum by serious intracranial compression, so that lumbar puncture by itself is of no great value in prognosis unless there is a large amount of blood in the fluid.

The idea that we can always relieve by decompression dangerous intracranial conditions needs, I think, modification. In a really bad case decompression will not save; in moderate cases it may perhaps save some, but will frequently be unnecessary as regards saving life. As to whether it is better to operate in order to forestall epilepsy, much has yet to be learned. I do not think myself that epilepsy is often staved off by decompression at the time of the accident. The late results of the head wounds in the

present war have shown that epilepsy has been surprisingly infrequent. Holmes and Sargent in 1100 cases of gunshot wounds of the cranium, examined six to eighteen months after the injury, found epilepsy and insanity to be remarkable by their absence.

Dr. G. D. Robins: I understand Dr. Archibald to refer to the number of cases that can be saved by operation in fracture of the skull as trifling; that is absolutely against our experience at the Western Hospital. There is no doubt at all in my mind that a large proportion of cases can be saved and have been saved by operation, that were clearly, from the way in which they were going on, certain to die otherwise. The case that Dr. England referred to is a notable illustration of this fact. As to what concussion means that is a disputed point, but I think it might be briefly defined as acute compression of the brain. I would like to refer to a case of fracture of the skull which I saw in the country, as representative not only of perfect recovery where there had been loss of cerebral tissue, but also as illustrating the great resistance to infection that the brain sometimes shows. A child three years of age went out behind a horse in a barn yard and was kicked in the frontal region close to the Rolandic area. I first supposed it was merely a torn scalp, but on examination I found the cerebral tissues freely mixed up with the hair and pieces of bone. The child was given an anæsthetic, the loose brain substance removed, and the brain cleansed as thoroughly as possible with peroxide of hydrogen. It was expected that meningitis would set in and the child die but he got better without an untoward symptom. A star case of Dr. England's at the Western Hospital may be mentioned. We have told of some cases that were very nearly dead and were saved by operation but we have not yet referred to the case that was actually dead (officially), and came to life again. This man was brought in with a depressed fracture of the frontal bone and in very bad condition. At operation the frontal bone was pried up, the hæmorrhage relieved and, contrary to all expectations, he recovered. In the meantime the newspapers had printed a report of the accident saying that the man had died, and subsequently the superintendent of the hospital, when called to the morgue regarding another case, found to his astonishment that an inquest was actually in progress on this man who was neither dead nor likely to die!

Medical Societies

CANADIAN MEDICAL ASSOCIATION:—President—Dr. Murray MacLaren, C.M.G., St. John, N.B. President-elect—Dr. A. D. Blackader, Montreal. Secretary-treasurer—Dr. J. W. Scane, 836 University Street, Montreal.

ACADEMY OF MEDICINE, TORONTO:—President—Dr. D. J. Gibb Wishart. Secretary—Dr. J. H. Elliot, 11 Spadina Road. Treasurer—Dr. J. H. McConnell.

ALBERTA MEDICAL ASSOCIATION:—President—Dr. W. A. Lincoln, Calgary. Secretary-treasurer—Dr. D. G. Revell, University of Alberta, Edmonton South. Annual Meeting, Calgary, 1917.

ASSOCIATION OF MEDICAL OFFICERS OF THE MILITIA:—President—Lt.-Colonel A. T. Shillington, A.M.C., Ottawa. Secretary—Captain T. H. Leggett, A.M.C., Ottawa.

ASSOCIATION OF MEDICAL OFFICERS OF NOVA SCOTIA:—President—Dr. George E. DeWitt, Wolfville. Secretary—Dr. W. W. Hattie, Halifax.

BRANT COUNTY MEDICAL SOCIETY:—President—Dr. E. R. Secord, Brantford. Secretary—Dr. M. N. Faris.

BRITISH COLUMBIA MEDICAL ASSOCIATION:—President—Dr. J. Glen Campbell, Vancouver. Secretary—Dr. H. W. Riggs, Vancouver.

CALGARY MEDICAL SOCIETY:—President—Dr. J. L. Allen. Secretary—Dr. J. E. Aikenhead. Treasurer—Dr. W. Shipley.

CANADIAN ASSOCIATION FOR THE PREVENTION OF TUBERCULOSIS:—President—Hon. J. W. Daniel, M.D., St. John. Secretary—Dr. George D. Porter, Ottawa.

CANADIAN HOSPITAL ASSOCIATION:—President—Dr. H. A. Boyce, Belleville. Secretary—Dr. J. M. E. Brown, Toronto.

CANADIAN PUBLIC HEALTH ASSOCIATION:—President—Dr. J. D. Pagé, Quebec. Secretary—Dr. J. G. Fitzgerald, University of Toronto. Annual meeting, Ottawa, 1917.

CENTRAL SOUTHERN ALBERTA MEDICAL SOCIETY:—President—Dr. J. S. Murray, Okotoks. Secretary-treasurer—Dr. G. E. Learmonth, High River.

COLCHESTER-HANTS MEDICAL SOCIETY:—President—Dr. J. W. T. Patton, Truro. Secretary—Dr. H. V. Kent, Truro.

EDMONTON ACADEMY OF MEDICINE:—President—Dr. C. U. Holmes. Secretary-treasurer—Dr. E. L. Garner. Library, 12 Credit Foncier Building.

ELGIN COUNTY MEDICAL ASSOCIATION:—President—Dr. G. A. Shannon, St. Thomas. Secretary-treasurer—Dr. W. F. Cornett, St. Thomas.

FRASER VALLEY MEDICAL SOCIETY:—President—Dr. DeWolfe Smith. Secretary—Dr. D. F. Carswell.

HALIDMAND COUNTY MEDICAL ASSOCIATION:—President—Dr. Hopkins, Dunnville. Secretary—Dr. Courley, Cayuga, Ont.

HALIFAX MEDICAL ASSOCIATION:—President—Dr. D. Fraser Harris. Secretary—Dr. Hugh Schwartz.

Medical Societies—Continued

- HAMILTON MEDICAL SOCIETY**:—President—Dr. R. Y. Parry. Corresponding Secretary—Dr. Fred Harper. Treasurer—Dr. T. W. Blanchard.
- HURON MEDICAL ASSOCIATION**:—President—Dr. Machell. Secretary—Dr. Hunter, Goderich, Ont.
- KINGSTON MEDICAL AND SURGICAL SOCIETY**:—President—Dr. G. W. Mylks. Secretary—Dr. W. R. Connell. Treasurer—Dr. H. E. Day.
- LAMBTON COUNTY MEDICAL ASSOCIATION**:—President—Dr. J. E. Kidd, Wyoming. Secretary-treasurer—Dr. A. R. McMillan, Sarnia.
- LEEDS AND GRENVILLE MEDICAL SOCIETY**:—President—Dr. J. C. Mitchell, Brockville. Secretary-treasurer—Dr. F. S. Vrooman, Brockville.
- LONDON MEDICAL ASSOCIATION**:—President—Dr. E. Spence. Secretary-treasurer—Dr. C. A. Harris.
- LUNENBURG-QUEEN'S MEDICAL SOCIETY**:—President—Dr. J. W. Smith, Liverpool. Secretary—Dr. L. T. W. Penney, Lunenburg.
- MANITOBA MEDICAL ASSOCIATION**:—President—Dr. James McKenty, Winnipeg. Secretary—Dr. A. T. Mathers, Winnipeg. Treasurer—Dr. T. Glen Hamilton, Winnipeg.
- MEDICAL OFFICERS OF HEALTH FOR COUNTIES OF LINCOLN AND WELLAND**:—President—Dr. King, St. Catharines. Secretary-treasurer—Dr. Howell, Welland.
- MEDICAL SOCIETY OF NOVA SCOTIA**:—President—Professor Fraser Harris, Halifax. Secretary-treasurer—Dr. J. R. Corston, Halifax.
- MEDICINE HAT MEDICAL SOCIETY**:—President—Dr. W. H. Macdonald. Vice-President—Dr. C. E. Smyth. Secretary-treasurer—Dr. J. S. Macleod.
- MONTREAL MEDICO-CHIRURGICAL SOCIETY**:—President—Dr. W. S. Morrow. Secretary—Dr. Grant Campbell.
- MOOSE JAW MEDICAL SOCIETY**:—President—Dr. J. M. Hourigan. Secretary-treasurer—Dr. J. Bloomer.
- NEW BRUNSWICK MEDICAL SOCIETY**:—President—Dr. S. C. Murray, Albert. Secretary—Dr. F. J. Hogan, St. John. Treasurer—Dr. W. E. Gray, Milltown. Annual meeting, St. John, July, 1917.
- NIAGARA DISTRICT MEDICAL ASSOCIATION**:—President—Dr. E. T. Kellam, Niagara Falls. Secretary—Dr. G. M. Davis, Welland.
- ONTARIO HEALTH OFFICERS' ASSOCIATION**:—President—Dr. A. J. Macauley. Secretary—Dr. W. J. S. McCullough, Toronto.
- ONTARIO MEDICAL ASSOCIATION**:—President—Dr. A. Dalton Smith, Mitchell. Treasurer—Dr. J. H. Elliott, Toronto. Secretary—Dr. F. A. Clarkson.
- OTTAWA MEDICAL SOCIETY**:—President—Dr. Charles W. Gorrell. Secretary—Dr. A. MacLaren. Treasurer—Dr. Harold Alford.
- OTTAWA MEDICO-CHIRURGICAL SOCIETY**:—President—Dr. J. F. Argue. Secretary—Dr. R. K. Paterson. Treasurer—Dr. A. S. McElroy.
- PERTH COUNTY MEDICAL ASSOCIATION**:—President—Dr. A. D. Smith, Mitchell. Secretary-treasurer—Dr. F. J. R. Forster, Stratford, Ontario.
- PETERBOROUGH MEDICAL SOCIETY**:—President—Dr. J. B. Mann. Secretary—Dr. G. Stewart Cameron. Treasurer—Dr. J. Malcolm McCulloch.
- PICTOU COUNTY MEDICAL ASSOCIATION**:—President—Dr. C. S. Elliott, Stellarton. Secretary—Dr. John Bell, New Glasgow.

Medical Societies—Continued

- PRINCE EDWARD ISLAND MEDICAL SOCIETY:—President—Dr. R. J. Macdonald, St. Peters. Secretary—Dr. Yeo, Charlottetown. Treasurer—Dr. W. J. MacMillan.
- REGINA MEDICAL SOCIETY:—President—Dr. Gorrell. Secretary—Dr. Dakin.
- ST. JOHN MEDICAL SOCIETY:—President—Dr. D. Malcolm. Secretary—Dr. F. P. Dunlop.
- ST. THOMAS MEDICAL ASSOCIATION:—President—Dr. Alexander Turner. Secretary-treasurer—Dr. James A. Campbell.
- SANITARY SERVICES OF THE PROVINCE OF QUEBEC:—President—Dr. A. Simard, Quebec. Secretary—Dr. J. A. Beaudouin, Lachine.
Annual Meeting, 1917, Rimouski.
- SASKATCHEWAN MEDICAL ASSOCIATION:—President—Dr. R. H. Love, Saskatoon. Secretary—Dr. J. W. Turnbull, Regina.
Annual meeting, Saskatoon, July, 1917.
- SASKATOON MEDICAL ASSOCIATION:—President—Dr. T. W. Walker. Secretary—Dr. J. T. Mackay.
- SIMCOE COUNTY MEDICAL ASSOCIATION:—President—Dr. Spohn, Penetanguishene. Secretary-treasurer—Dr. H. T. Arnall, Barrie.
- SOCIÉTÉ MÉDICALE DE MONTRÉAL:—President—M. B. G. Nourgeois, Secretary—H. M. Aubry, 323 Sherbrooke Street East, Montreal.
- SOCIÉTÉ MÉDICALE DU DISTRICT D'OTTAWA:—President—Dr. M. Aubry. Secretary—Dr. M. J. E. D'Amour, Papineauville.
- SOCIÉTÉ MÉDICALE DE QUÉBEC:—President—Dr. M. Savard. Secretary—Dr. M. Couillard, Quebec.
- SOCIÉTÉ MÉDICALE DE TROIS-RIVIÈRES:—President—Dr. M. Deblois. Secretary—Dr. O. Darche.
- SWIFT CURRENT DISTRICT MEDICAL ASSOCIATION:—President—Dr. Graham. Secretary-treasurer—Dr. Hughes.
- THUNDER BAY MEDICAL SOCIETY:—President—Dr. E. B. Oliver, Fort William. Secretary-treasurer—Dr. J. G. Hunt, Port Arthur.
- TWIN CITY MEDICAL ASSOCIATION:—President—Dr. W. L. Hilliard. Secretary—Dr. J. E. Hett, Berlin, Ont. Assistant Secretary—Dr. G. E. Chapman.
- VALLEY MEDICAL SOCIETY:—President—Dr. M. E. Armstrong, Bridgetown. Secretary—Dr. T. M. MacKinnon, Berwick, N.S.
- VANCOUVER MEDICAL ASSOCIATION:—President—Dr. J. H. McDermott. Secretary—Dr. J. W. Ford.
- WEST ELGIN MEDICAL SOCIETY:—President—Dr. D. A. Cameron, Dutton. Secretary-treasurer—Dr. D. J. Galbraith, Dutton.
- WINNIPEG MEDICAL SOCIETY:—President—Dr. Jasper Halpenny. Secretary—Dr. Secord.